

# Red River of the North Basin

## **Thaw/Flood2020 Update**

26 March 2020

Gregory Gust

Warning Coordination Meteorologist

NOAA, NWS Grand Forks ND

[gregory.gust@noaa.gov](mailto:gregory.gust@noaa.gov) ph: 701-795-5127

## Bottom Line up Front:

- Overall Slow/Gentle Thaw process should continue into early April.
  - Next 7 to 10 Days of near to above 32F, very little expected precip.
- This week/end... far Southern RRB is rising through Mod-Maj Stages.
  - Streams/Rivers into Wahpeton-Breckenridge will fluctuate near/blo Minor Stage.
  - Streams/Rivers into/blo Fargo-Moorhead continue steady rises thru Moderate Stage.
  - South Br. Buffalo River (Sabin MN) rising towards Action and Minor Stages.

→ Red River at Fargo-Moorhead and ND Wild River at Abercrombie rise thru Moderate Stage thru Sun.

- Next week/end... central RRB Tribs and Red start rising, south Crests.
  - In ND: Expect Sheyenne, Maple, Rush, and Goose forecasts starting.
  - In MN: Expect Buffalo, MN Wild Rice, Marsh forecasts starting.
  - Crests Possible: ND Wild River at Abercrombie BR and Red River at Fargo-Moorhead late next week.
  - Red River Mainstem: Continue rises and river opening through Grand Forks.

→ Red River at Fargo-Moorhead possible crest 30-32 ft. on or around April 1-4. \*

- Daily Calls start on Monday of next week.

\*Fargo crest info adjusted since original telecon.

# 7-Day Total Precipitation (Liquid Equivalent), 18-25 March 2020

Eastern North Dakota/Grand Forks, ND: Last 7-Day Observed Precipitation  
Valid on: March 25, 2020 12:00 UTC



Print this map

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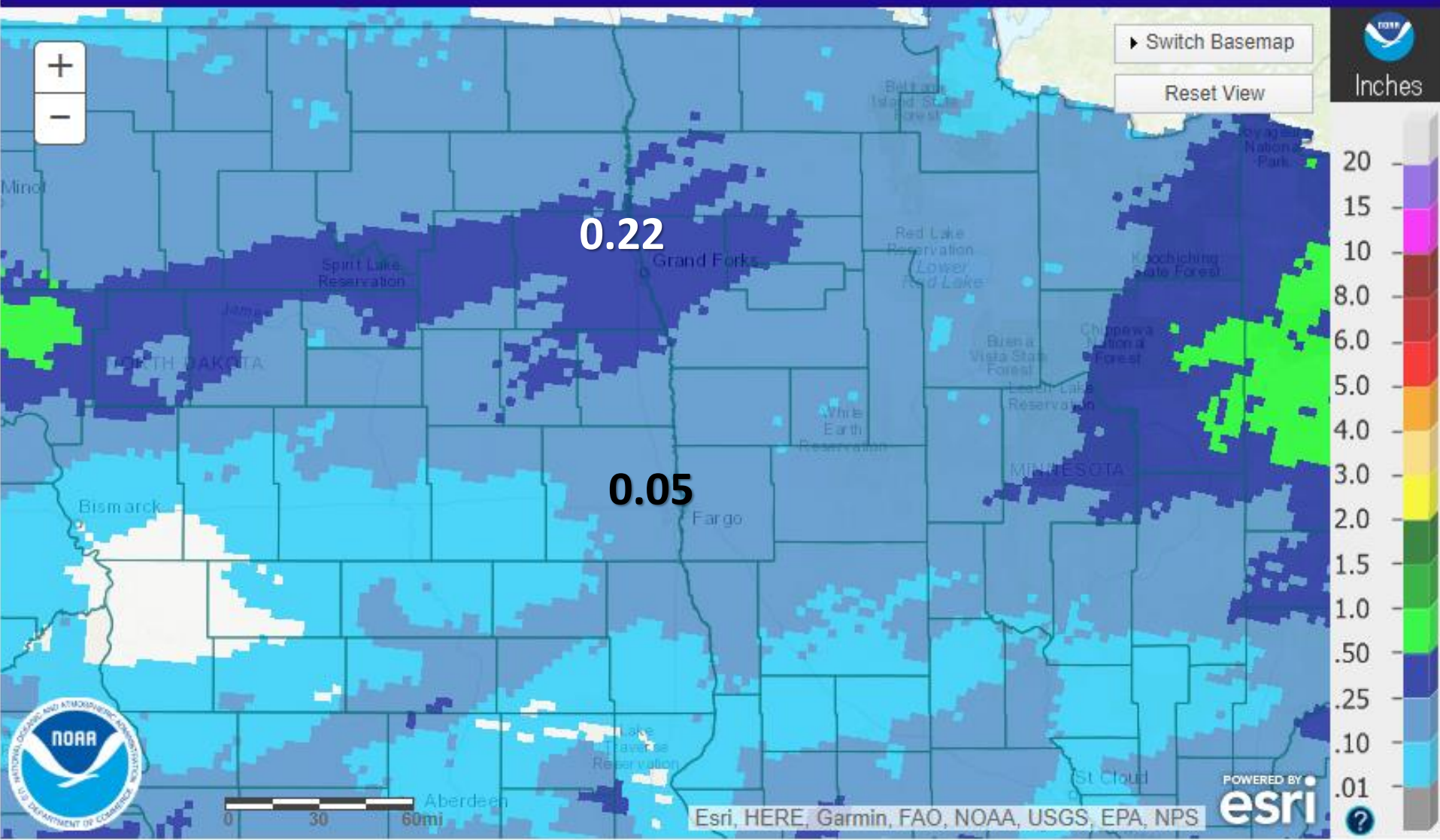
BOOKMARK



What is UTC time?

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# 14-Day Total Precipitation (Liquid Equivalent), 11-25 March 2020

Eastern North Dakota/Grand Forks, ND: Last 14-Day Observed Precipitation  
Valid on: March 25, 2020 12:00 UTC



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Permalink

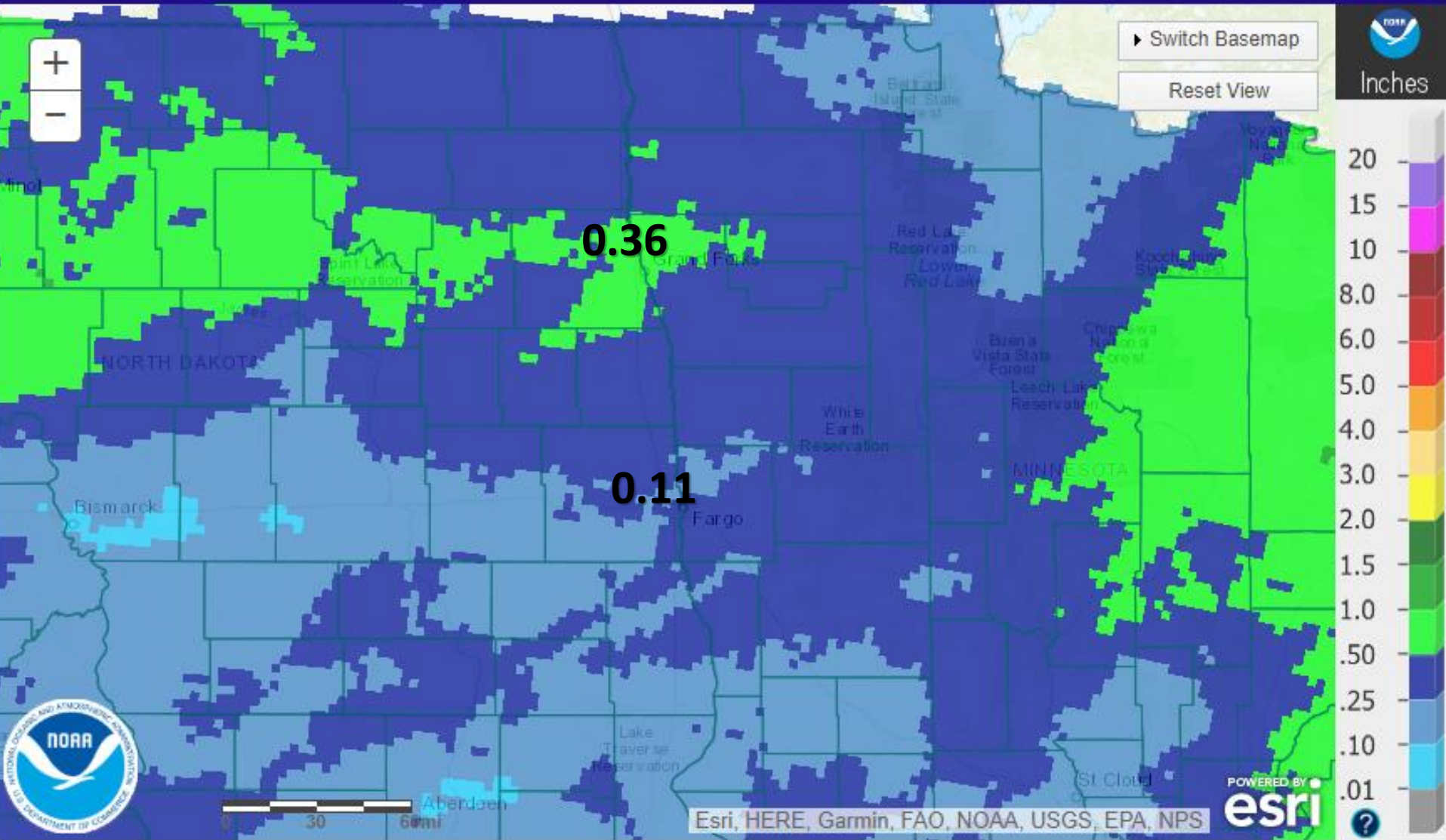
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# 2 Mo Total Precipitation (Liquid Equivalent), 25 Jan - 25 Mar 2020

Eastern North Dakota/Grand Forks, ND: Last 60-Day Observed Precipitation  
Valid on: March 25, 2020 12:00 UTC



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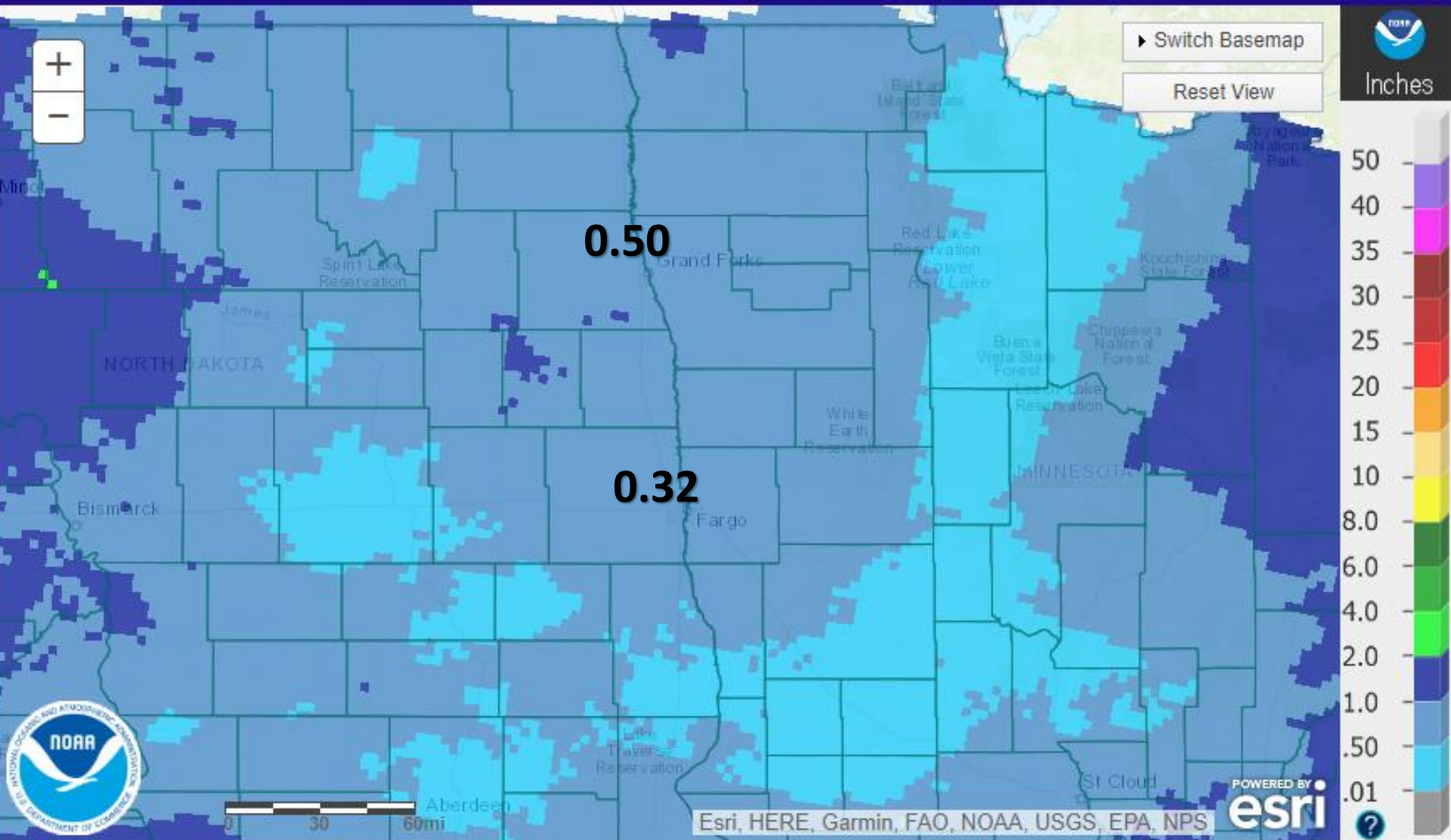
BOOKMARK



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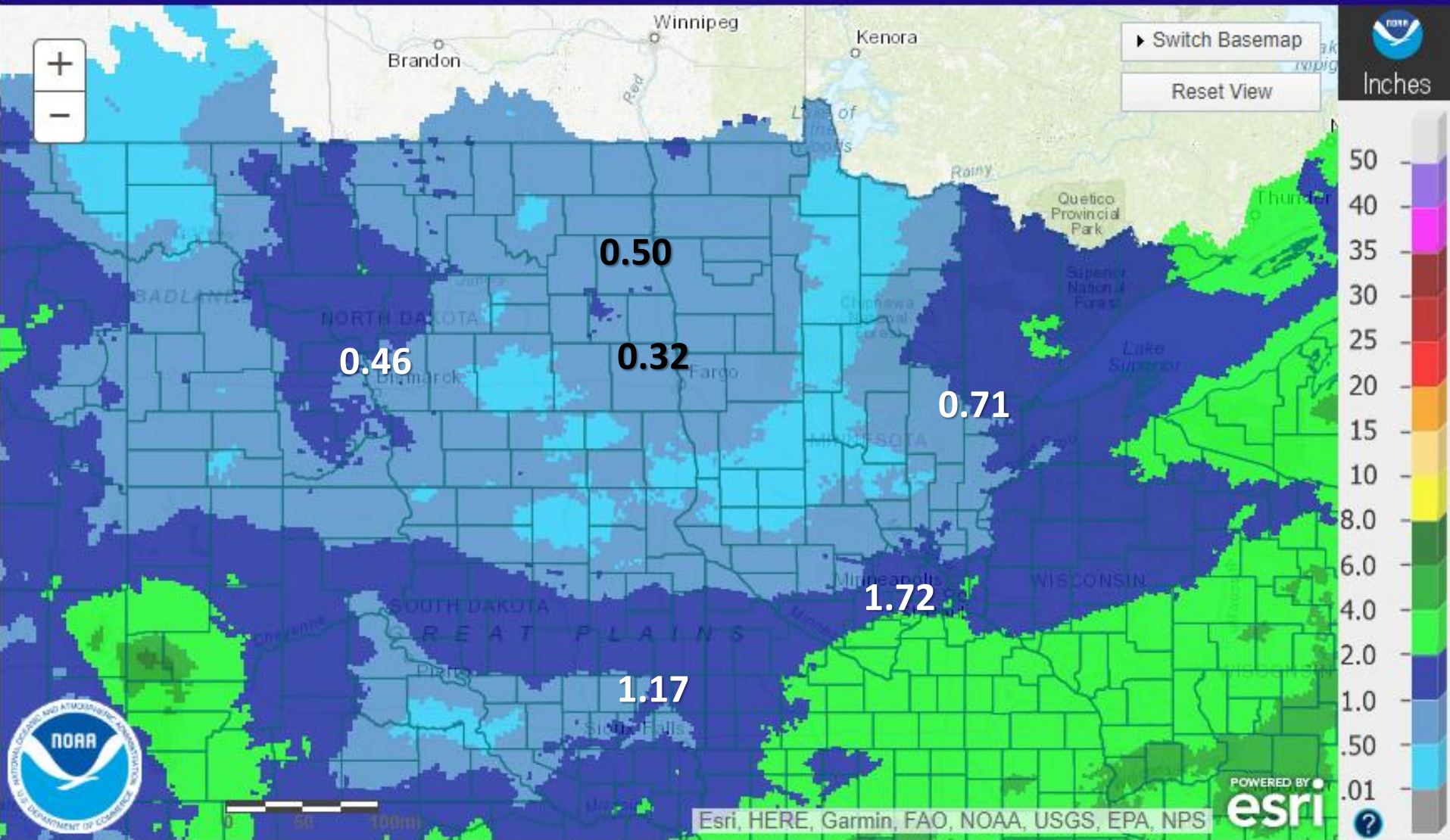
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# 2 Mo Total Precipitation (Liquid Equivalent), 25 Jan - 25 Mar 2020

Eastern North Dakota/Grand Forks, ND: Last 60-Day Observed Precipitation  
Valid on: March 25, 2020 12:00 UTC



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Permalink



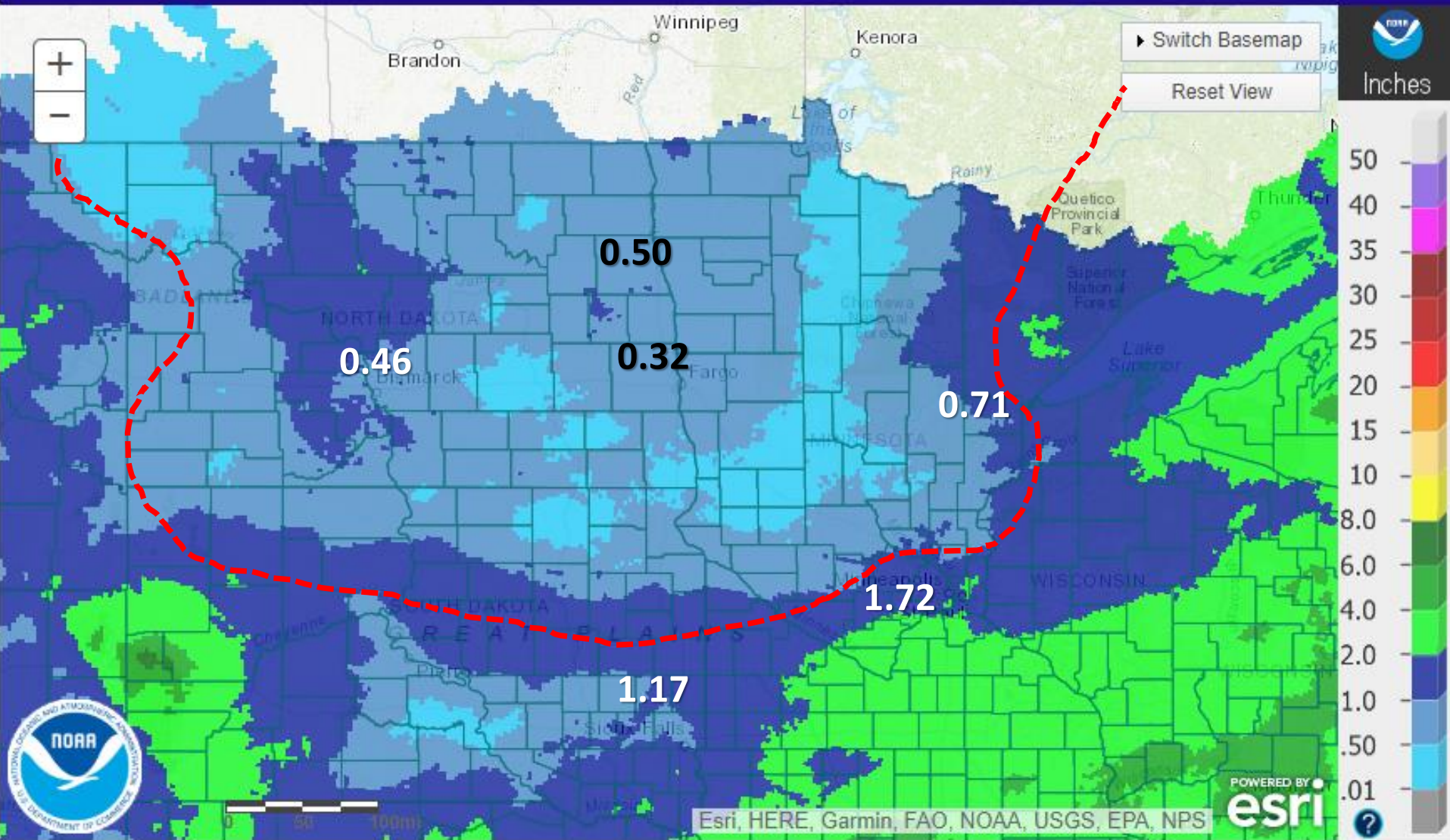
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# 2 Mo Precip Blo-Norm (Liquid Equivalent), 25 Jan - 25 Mar 2020

Eastern North Dakota/Grand Forks, ND: Last 60-Day Departure from Normal  
Precipitation

Valid on: March 25, 2020 12:00 UTC

[What is UTC time?](#)

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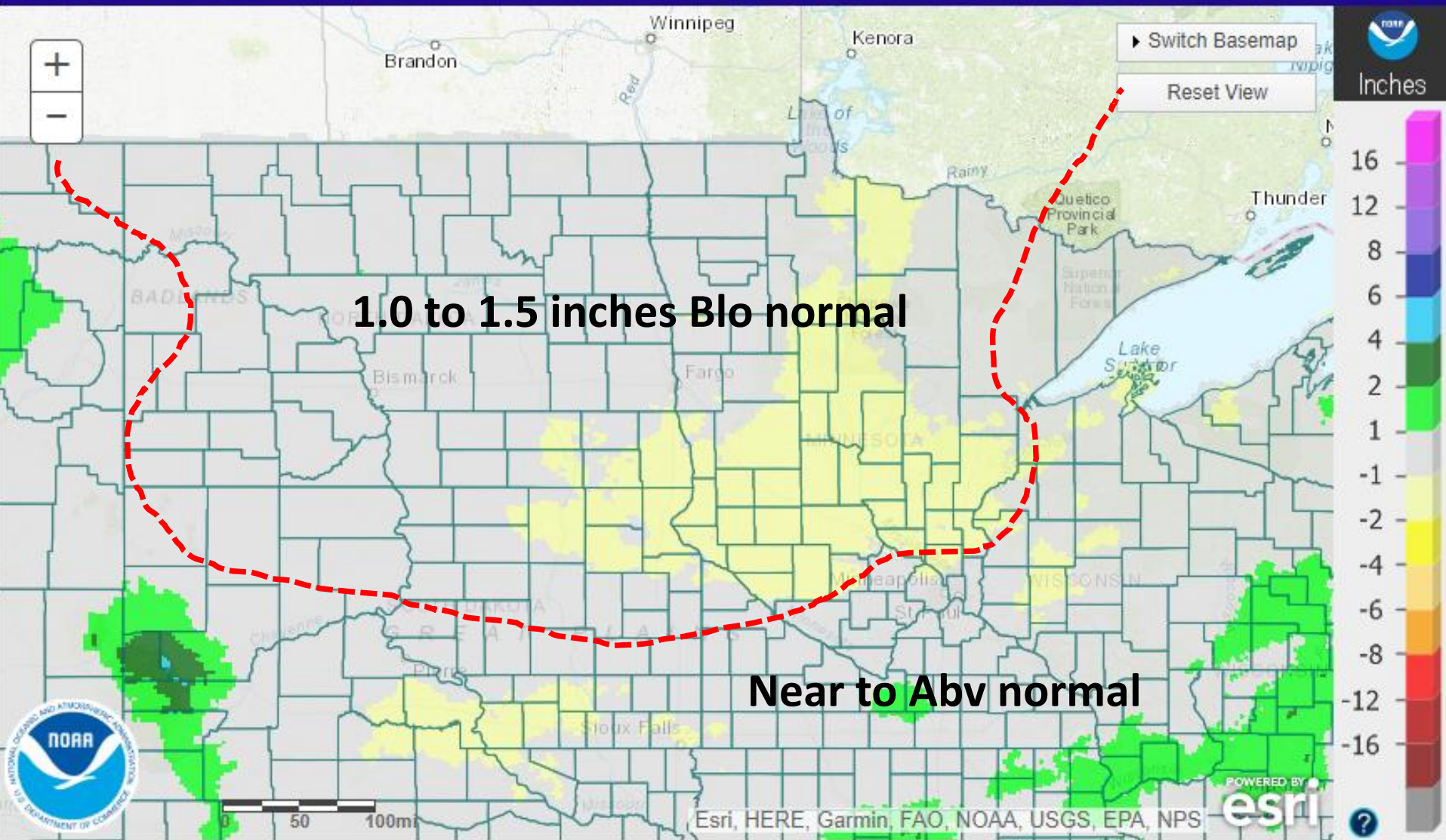


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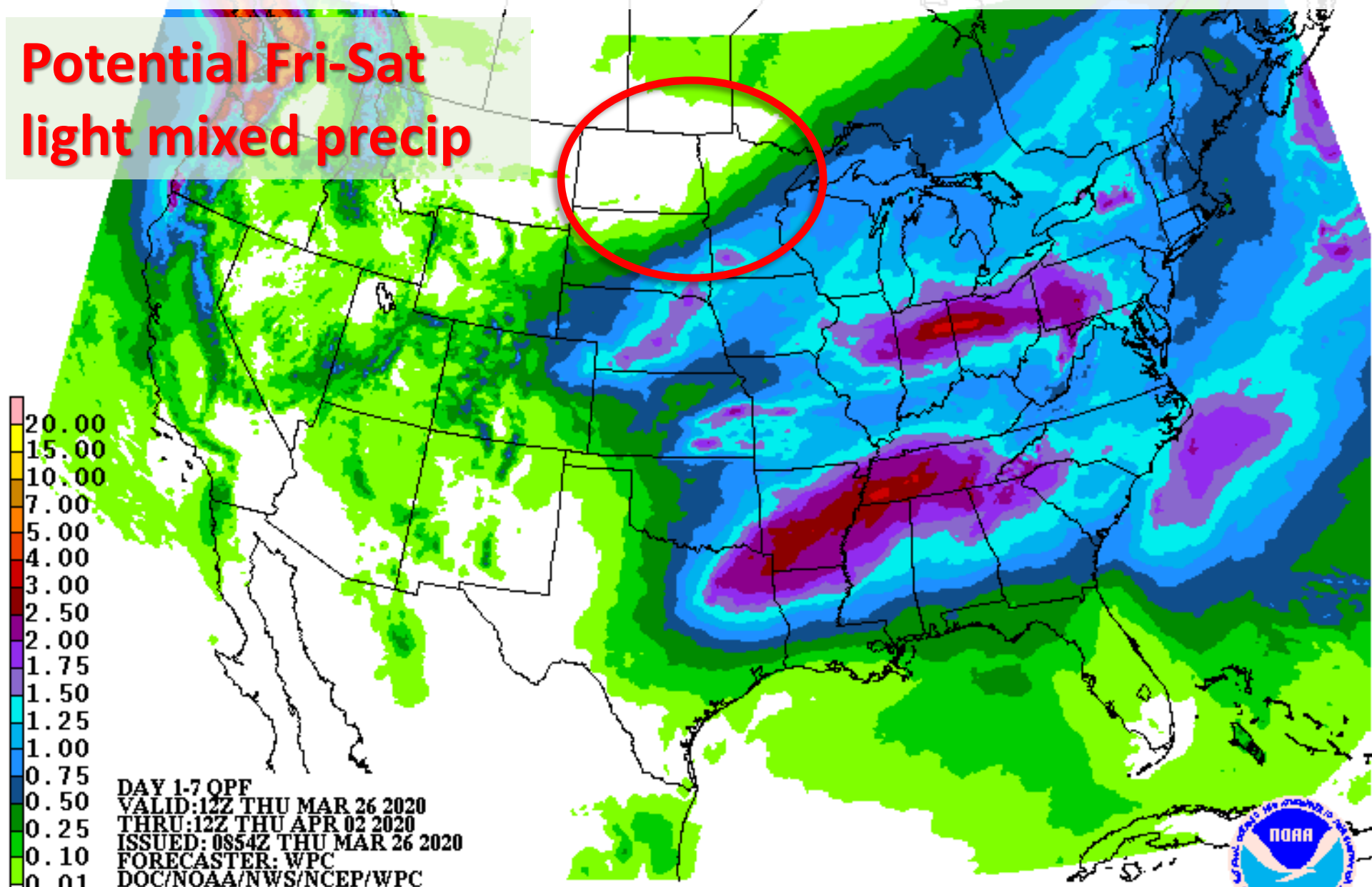
Find address or location





**Week 1 forecast precipitation: 0.10 to 0.25 inches far South RRB**

**Potential Fri-Sat  
light mixed precip**



**(Today through next Thursday)**

For easy viewing of official NWS temperature and weather graphs, for any part of the Red River Basin and surrounding area, check out:

<https://www.weather.gov/dlh/dsstable>

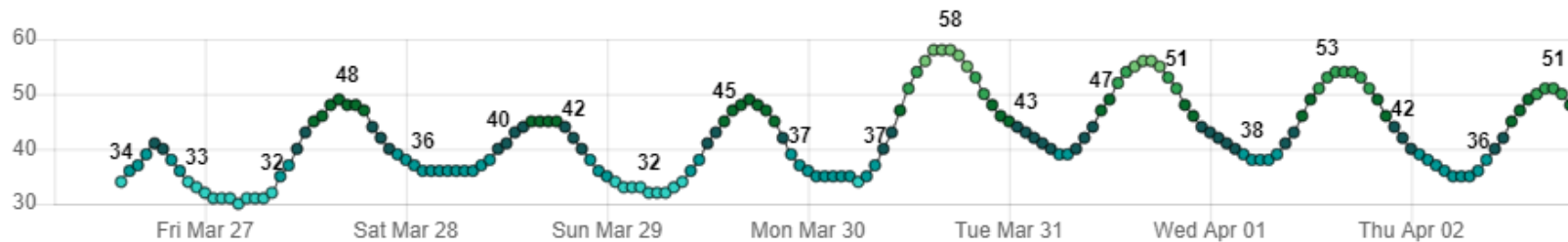
The following 3 images are taken from this webpage, reflecting 7-day forecast conditions:

1. Along the SD border near Whiterock Dam,
2. Near the Fargo-Moorhead area,
3. Near the Grand Forks-East Grand Forks area.

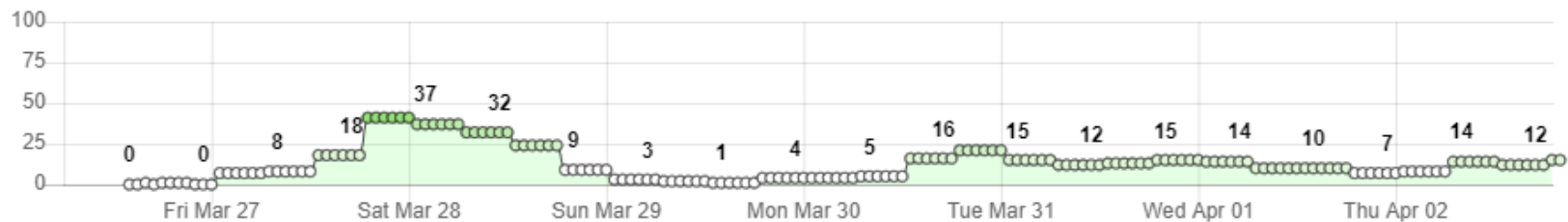


**Near White Rock Dam...** The 7-day temp and precip forecast for Mar 27 - Apr 2 shows temperatures well above the thaw point, both day and night, so all remaining snow and melt water should come off the landscape and move into and down the tributaries and into the mainstem Red, downstream from Wahpeton-Breckenridge. A small amount of precipitation is expected Saturday but nothing to significantly affect the river levels.

### Hourly Graphs Temperature, °F



### Probability of Precipitation, %

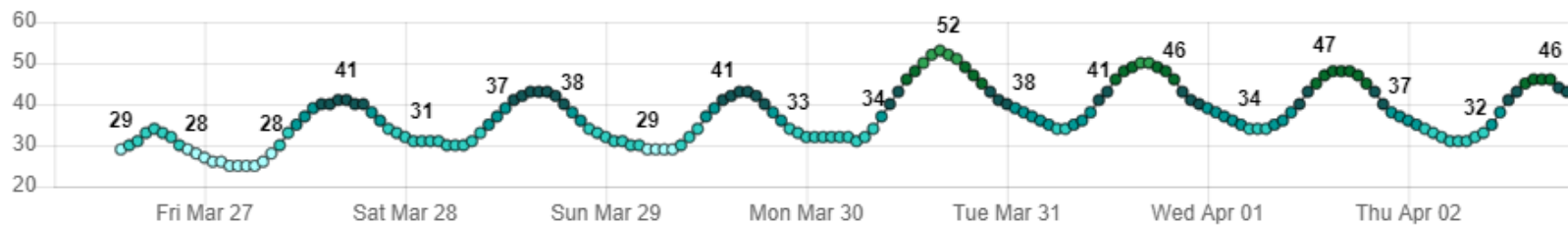


### Precip. Amount, in

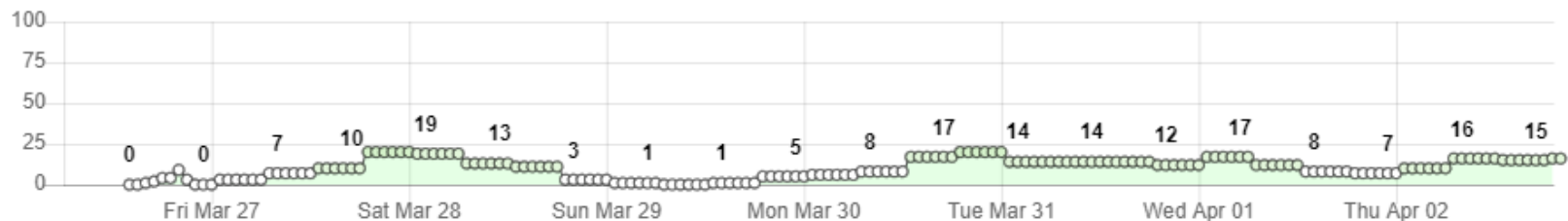


**Near Fargo-Moorhead...** The 7-day temp and precip forecast for Mar 27 - Apr 2 shows a steady warm-up with all days warming well above the thaw point, and nighttime temps remaining near to above freezing, with no sig. precip expected. Most all snowpack/runoff should move off the landscape and through smaller streams into Tributaries and along the mainstem Red.

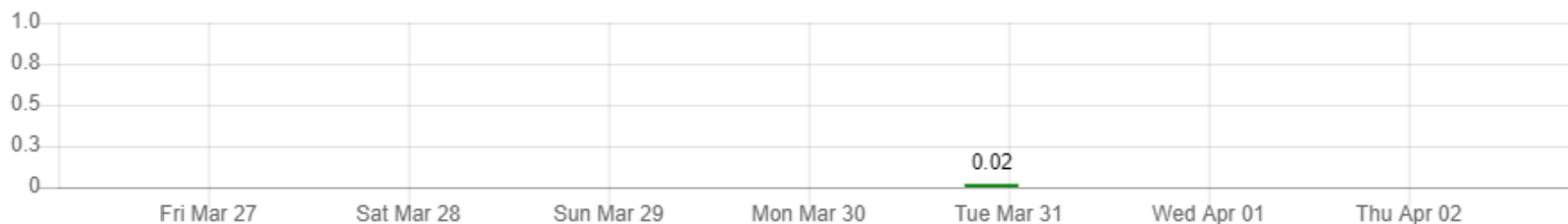
### Hourly Graphs Temperature, °F



### Probability of Precipitation, %



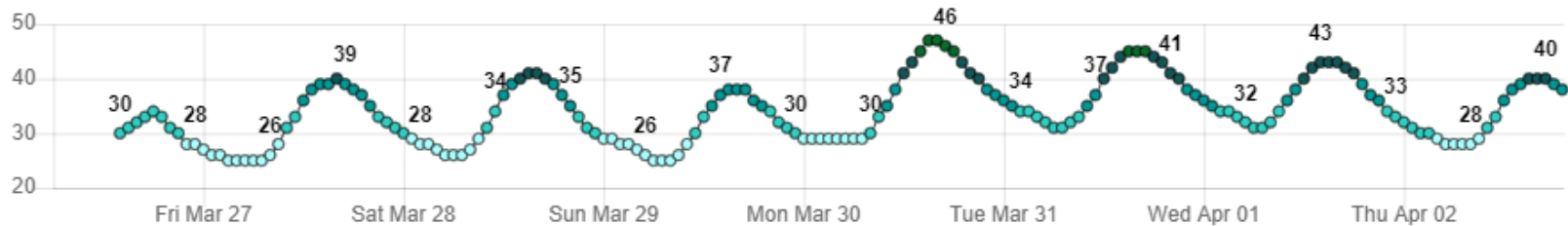
### Precip. Amount, in



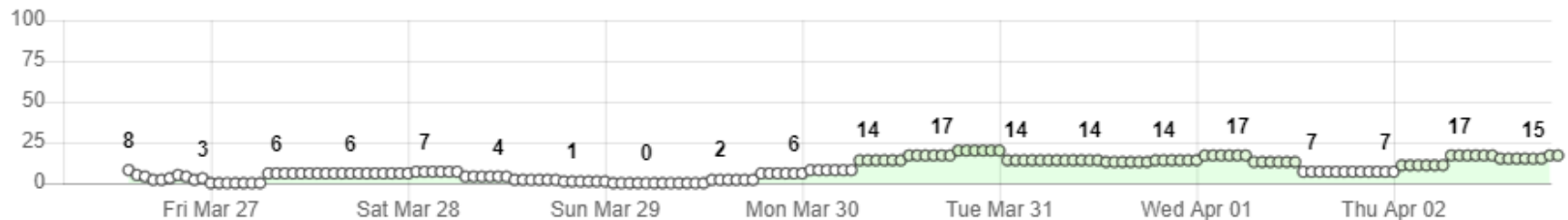


**Nearer Grand Forks...** The 7-day temp and precip forecast for Mar 27 - Apr 2 shows a steady warm-up with all days warming well above the thaw point, with a few nights dipping below freezing for a short period, and no sig. precip expected. Most snowpack should continue melting with significant flow beginning to move in ditches and smaller streams. Tributaries and the mainstem Red will start to show some rise, but more thaw time will be needed to complete the runoff.

### Hourly Graphs Temperature, °F



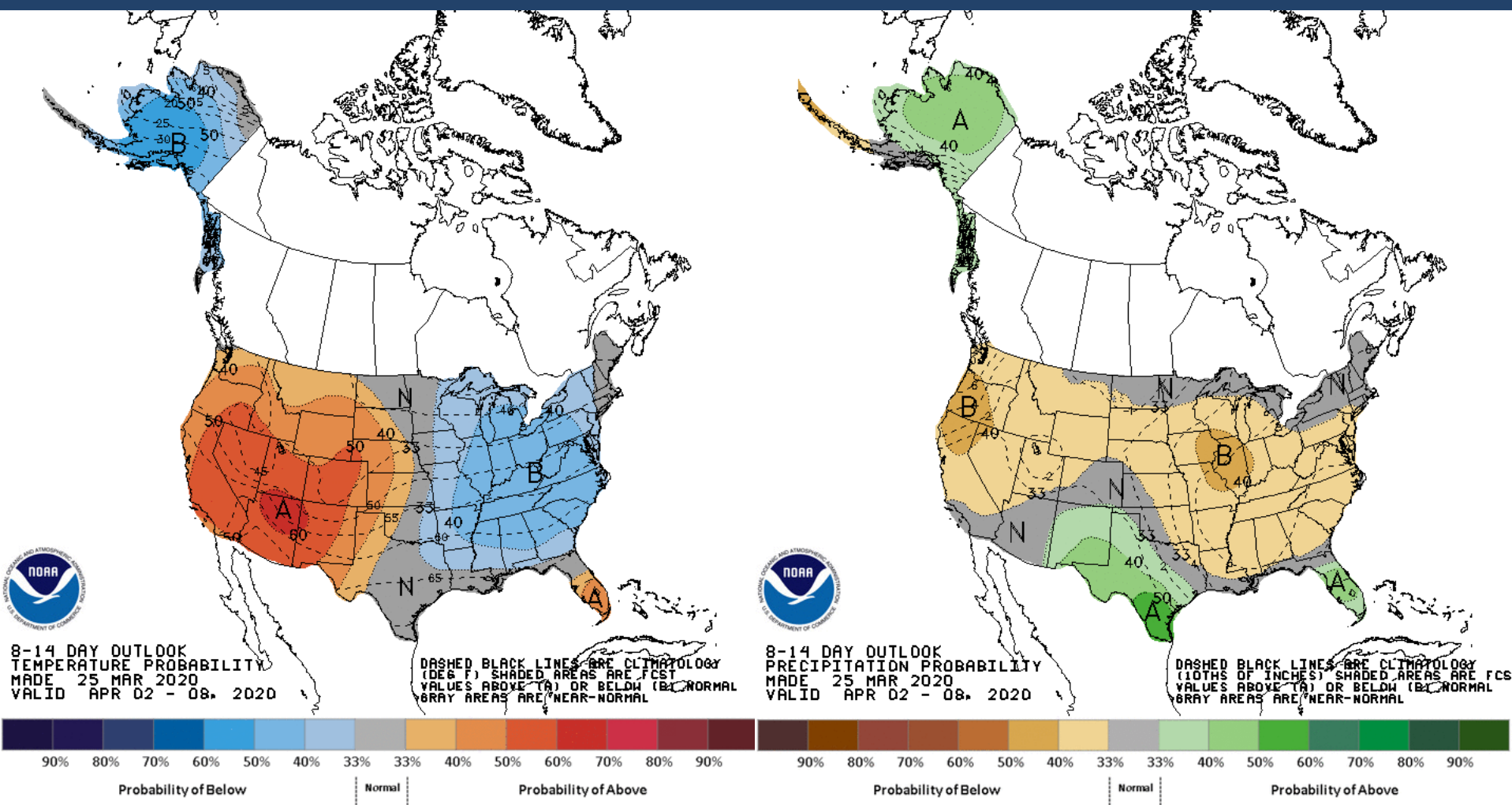
### Probability of Precipitation, %



### Precip. Amount, in



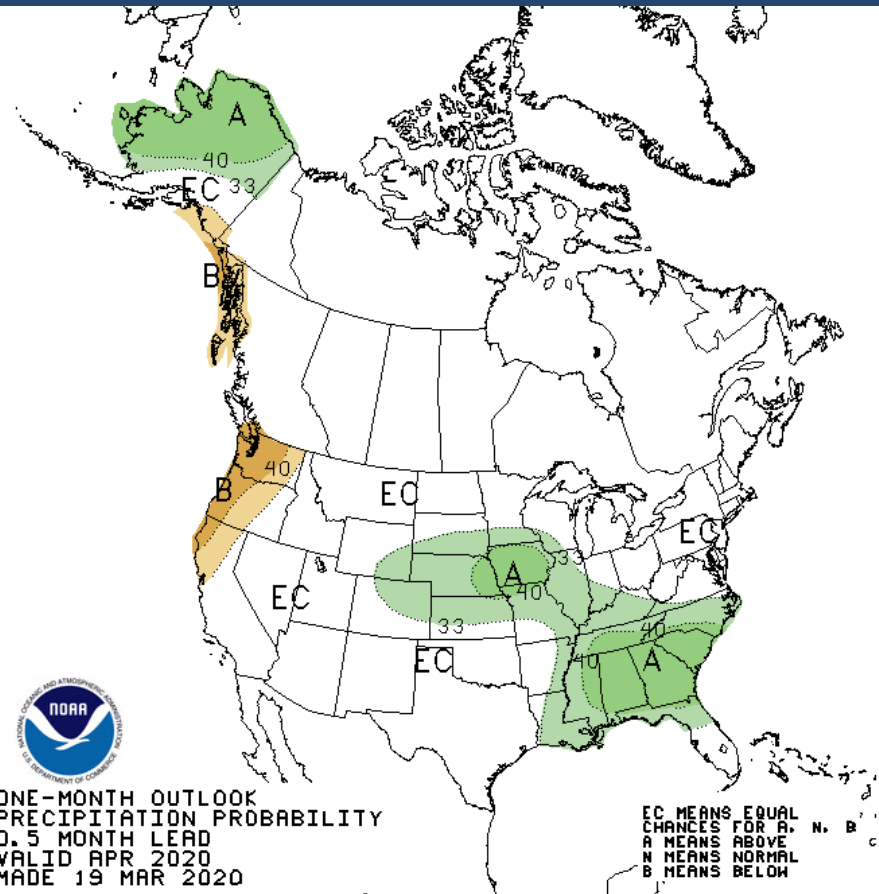
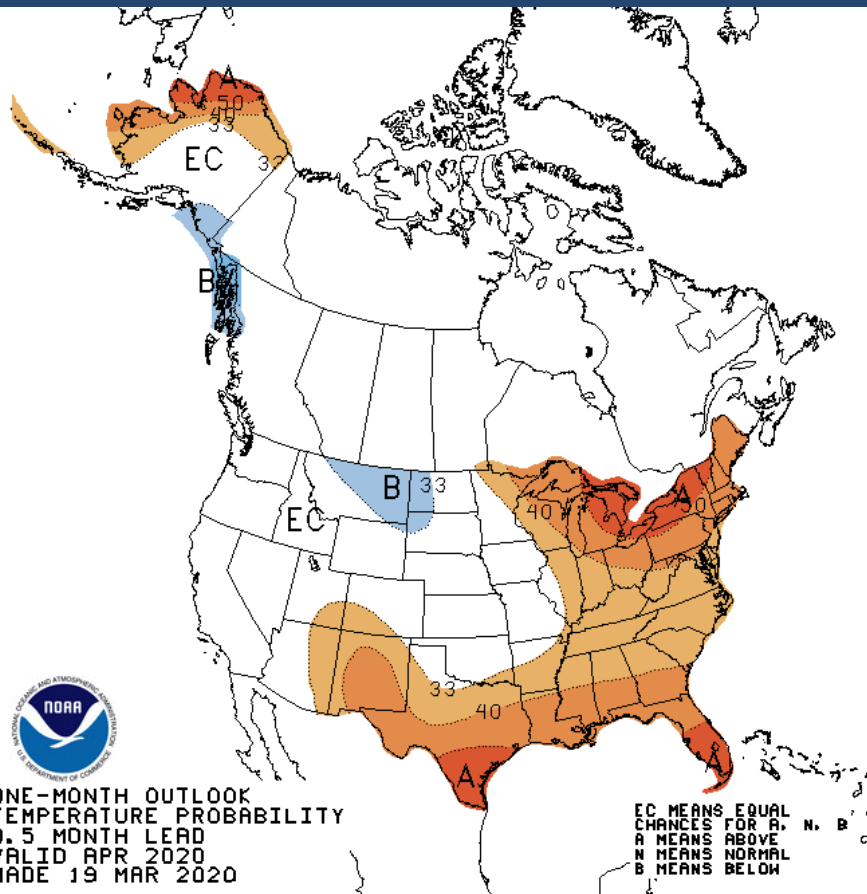
# Week 2: Near Norm Temps and Precip



Week 2 (8-14 day) Outlook - issued March 18<sup>th</sup>

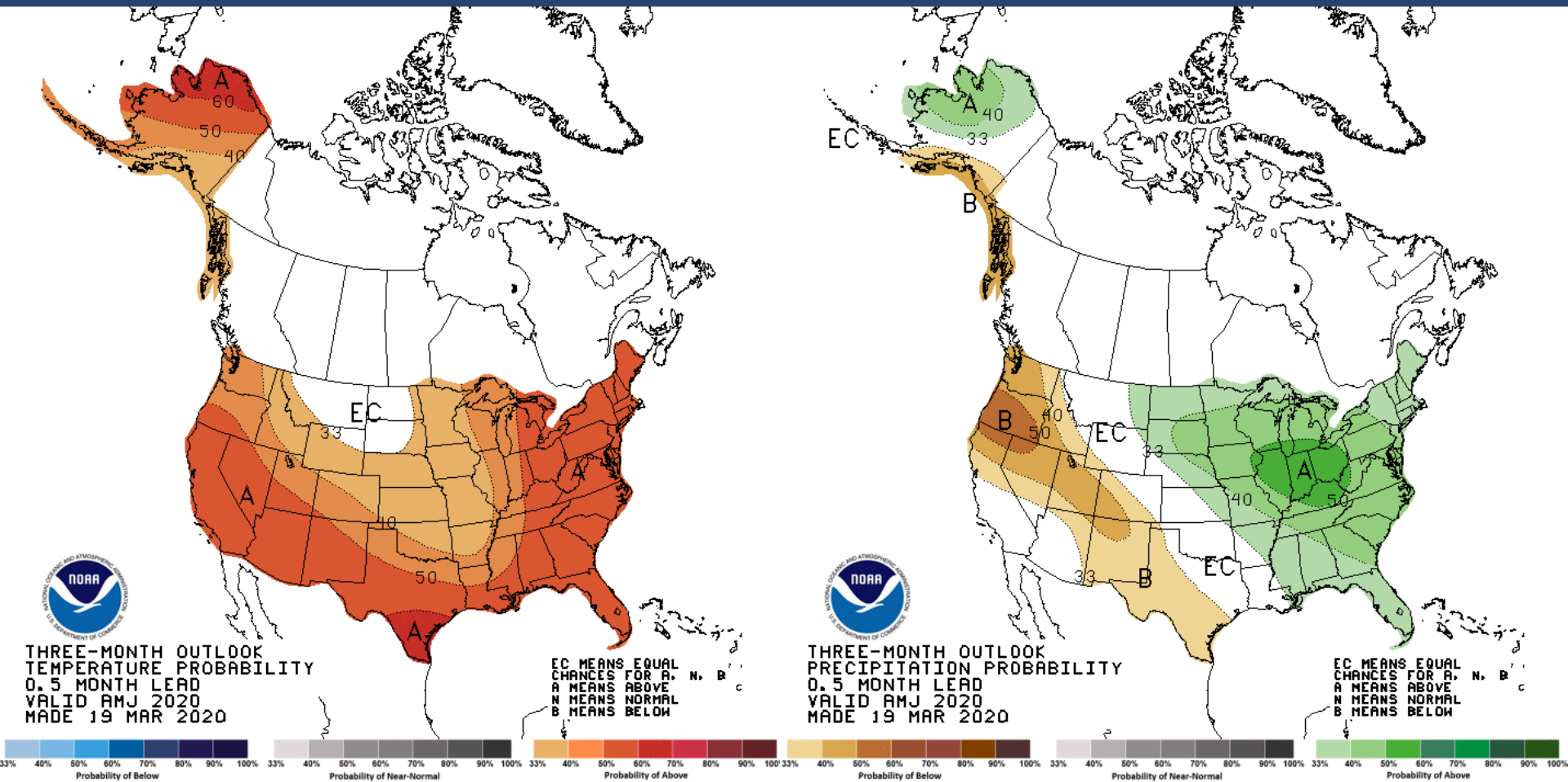


# No clear climate signal showing for most of April



April Outlook - issued March 19<sup>th</sup>

# Warmish and Wetish signal as we move thru Spring



April, May, June Outlook - issued March 19<sup>th</sup>

# Red River near Brushvale MN, on 25 Mar 2020

## [At MN CR18 Bridge, @0.5 W of Brushvale]

Looking downstream (north), shows sheet ice rising with the increased flow, and beginning to breakup.



[Image courtesy of Cass Co. Highway Department]



# Wild Rice near Abercrombie, on 25 Mar 2020

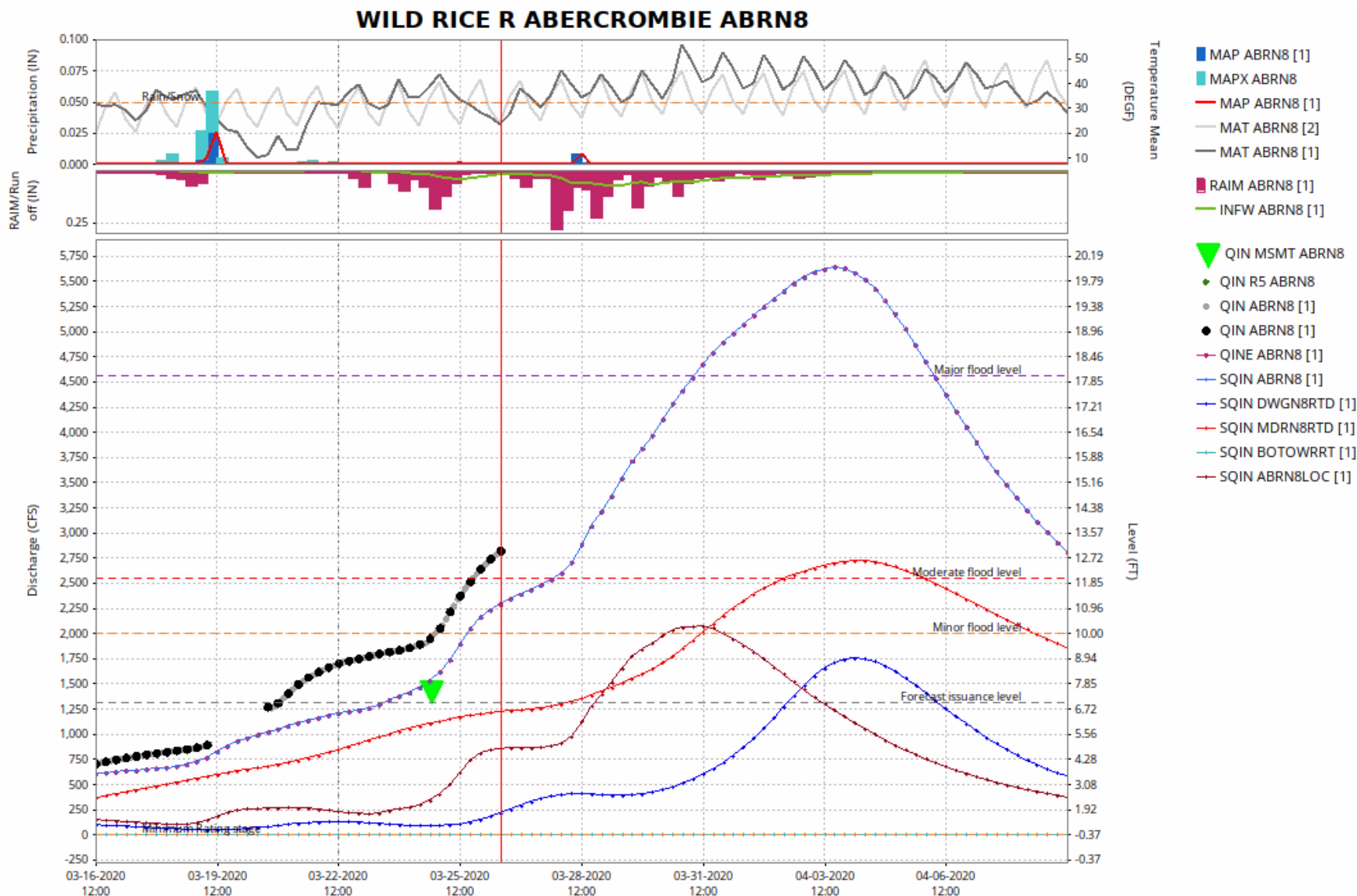
[At CR6 Bridge, @2.5 WSW of Abercrombie]

Looking downstream (north), shows more ice breakup, and ice moving downstream with the flow.



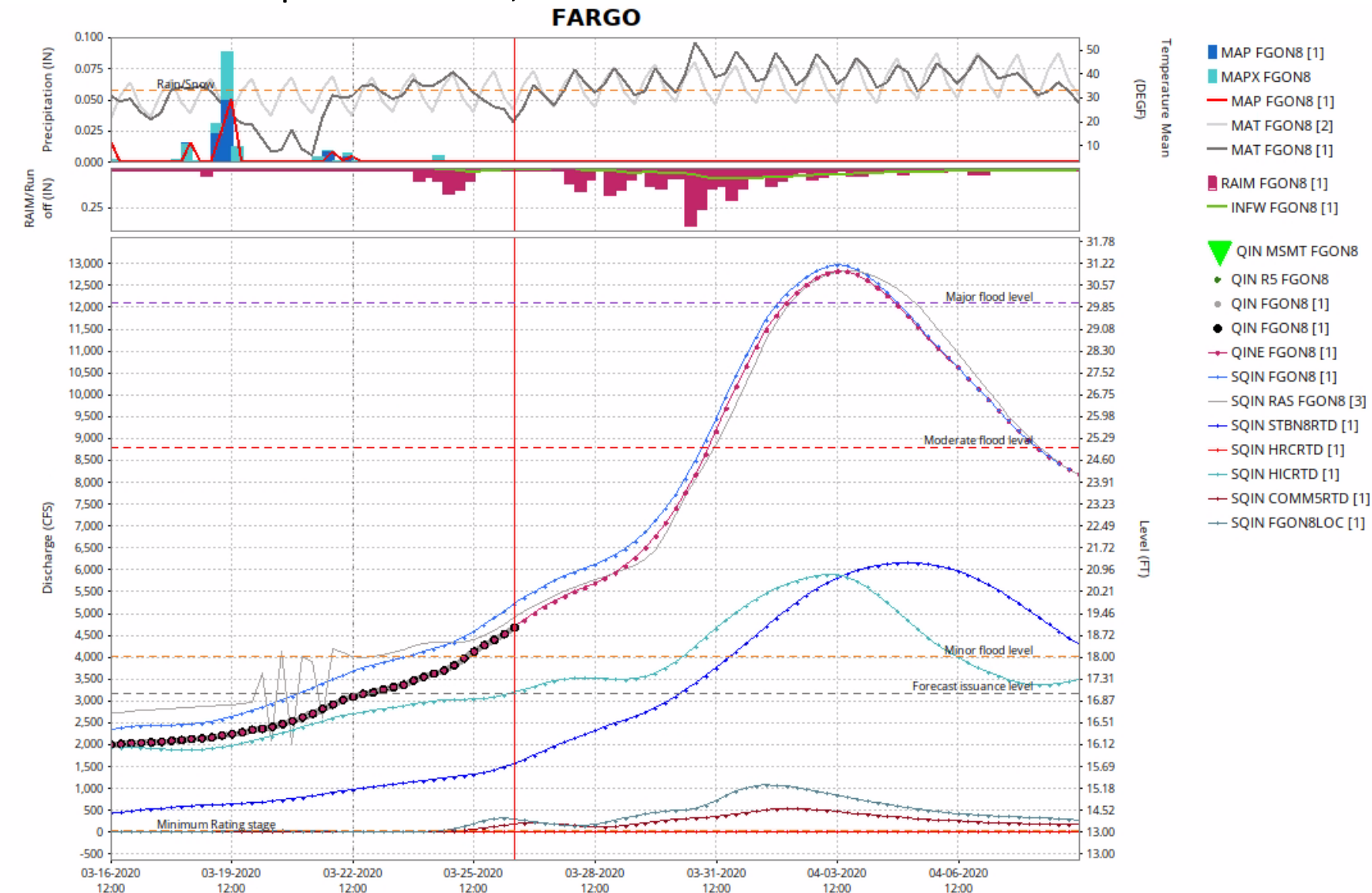
[Images courtesy of Cass Co. Highway Department]

River model simulations show the ND Wild Rice near Abercrombie as currently experiencing some ice jamming. Current forecast is for the crest to reach near Abercrombie between April 1<sup>st</sup> and 4<sup>th</sup>, at a level of between 19 and 21 ft.



red\_Forecast\_opie: [1] red 03-26-2020 12:00:00 GMT Current historical\_mean\_MAT: [2] Create historical mean MATs 03-22-2020 12:00:00 GMT Current

River model simulations show the Red River at Fargo-Moorhead as rising cleanly, under ice cover. Current forecast is for the crest to reach the F-M area between April 1<sup>st</sup> and 4<sup>th</sup>, at a level of between 30 and 32 ft.

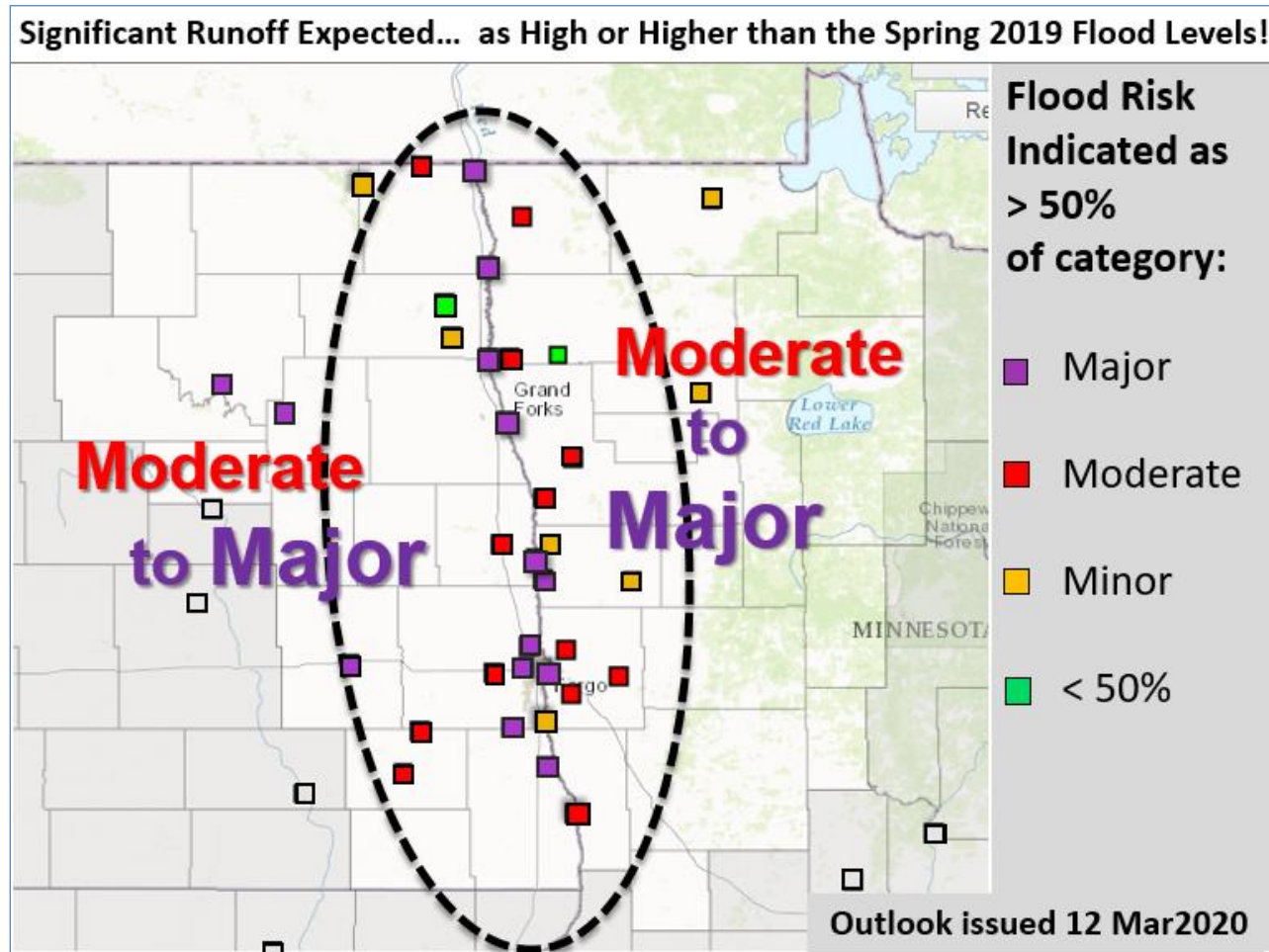


red\_Forecast\_opie: [1] red 03-26-2020 12:00:00 GMT Current historical\_mean\_MAT: [2] Create historical mean MATs 03-22-2020 12:00:00 GMT Current

redras Forecast: [3] RED 03-26-2020 12:00:00 GMT Current



# Flood Risk by Category at River Forecast Points



These AHPS probabilities from 12 March remain in play until the main thaw and runoff are clearly underway. Once “deterministic” flood forecasts begin, they become the primary guidance source.

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- Daily Calls start on Monday of next week.

\*Fargo crest info adjusted since original telecon.

# **Thaw/Flood2020 Updates:**

Daily Webinar/Telecon Updates will start on Monday...  
March 30<sup>th</sup>, and continuing...

Else, check our Flood Briefing web-page regularly.

Gregory Gust

Warning Coordination Meteorologist

NOAA, NWS Grand Forks ND

[gregory.gust@noaa.gov](mailto:gregory.gust@noaa.gov) ph: 701-795-5127